# REPORT OF ACTIVITIES OF THE DEPARTMENT OF WATER RESOURCES

by

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#### WATER CONDITIONS

As of December 31, 2008, statewide hydrologic conditions were as follows: precipitation, 90 percent of average to date; runoff, 40 percent of average to date; and reservoir storage, 70 percent of average for the date. The snowpack is at about 75 percent of its average value for the date. Sacramento River unimpaired runoff observed through December 31, 2008 was about 1.4 million acre-feet (MAF), which is about 44 percent of average. (On December 31, 2007, the observed Sacramento River unimpaired runoff through that date was about 1.5 MAF or about 47 percent of average.)

On January 8, 2009, the Northern Sierra 8-station Precipitation Index had accumulated a seasonal total of 15.3 inches, which is 77% of the seasonal average to date and 31% of an average Water Year (50.0 inches). During December 2008, the 8-Station Index received 6.0 inches, about 71% of average. Last year at this time, the 8-Station Index had 17.8 inches for the seasonal total. January has started out dry, and approximately two-thirds of the rainy season remains to go.

Beginning in mid-December 2008, a series of strong, cold weather systems brought significant amounts of precipitation to California, especially in Southern California. By late December, these storms started to generate inflow into the large multipurpose reservoirs across the State, and snowfall accumulation began in the Sierra. For the month as a whole, rainfall was generally below normal in the northern two-thirds of California and wetter than normal in the southern one-third. Temperatures were below normal for much of the State.

Selected Cities Precipitation Accumulation as of 1/01/2009 (National Weather Service Water Year: July												
through June)												
City	Jul 1 to Date 2008 - 2009 (in inches)	% Avg	Jul 1 to Date 2007 - 2008 (in inches)	% Avg	% Avg Jul 1 to Jun 30 2008 - 2009							
Eureka	12.23	76	16.20	101	32							
Redding	7.46	63	9.78	83	22							
Sacramento	4.75	78	5.14	84	26							
San Francisco	5.01	73	5.36	78	24							
Fresno	2.70	79	2.64	77	24							
Bakersfield	1.69	88	0.83	43	26							
Los Angeles	4.66	120	3.76	97	30							
San Diego	6.05	188	2.19	68	56							

Key Reservoir Storage (1,000 AF) as of 1/01/2009												
Reservoir	River	Storage	Avg Storage	% Average	Capacity	<b>%</b>	Flood Control Encroachment	-				
Trinity Lake	Trinity	978	1,671	59	2,448	40		1,470				
Shasta Lake	Sacramento	1,364	2,904	47	4,552	30	-2,022	3,188				
Lake Oroville	Feather	980	2,230	44	3,538	28	-2,170	2,558				
New Bullards Bar Res	Yuba	460	538	86	966	48	-336	506				
Folsom Lake	American	218	480	45	977	22	-359	759				
New Melones Res	Stanislaus	1,147	1,345	85	2,420	47	-823	1,273				
Don Pedro Res	Tuolumne	1,046	1,331	79	2,030	52	-644	984				
Lake McClure	Merced	250	456	55	1,025	24	-425	775				
Millerton Lake	San Joaquin	194	280	69	520	37	-241	326				
Pine Flat Res	Kings	180	420	43	1,000	18	-490	820				
Isabella	Kern	117	154	76	568	21	-53	451				
San Luis Res	(Offstream)	490	1,408	35	2,039	24		1,549				

The latest National Weather Service Climate Prediction Center (CPC) long-range weather outlook for January 2009, issued December 31, 2008, forecasts average precipitation for all of California.

#### FLOOD PROJECT INTEGRITY AND INSPECTION BRANCH

# Local Agency Annual Report for 2008 (per Assembly Bill 156)

On December 31, 2008 a copy of the 2008 Local Agency Annual Report was delivered to Jay Punia, General Manager of the Central Valley Flood Protection Board. This Report, prepared by the Department of Water Resources, Division of Flood Management, Flood Project Integrity and Inspection Branch, represents the first in a series of annual reports of information submitted by local levee maintaining agencies (Local Agencies) for Project Levees along the Sacramento and San Joaquin Rivers in California. This Report is required by California Water Code (CWC) Section 9141, which was added to the CWC as a result of Assembly Bill 156 (AB 156, Laird) enacted during the 2007-08 Legislative Session. The additions to the CWC resulting from AB 156 became effective on July 1, 2008, and they included requirements for Local Agencies to submit specific information for the levees they maintain by September 30 each year. In turn, the Department of Water Resources is required to summarize the information in an Annual Report to the Central Valley Flood Protection Board by December 31 each year.

Hard copy editions of this Report are currently being reproduced for distribution to all Board members by the end of January, and an electronic version will be made available for website viewing. This Report location information will be provided to the following entities:

- 1. The Local Agency;
- 2. Any city or county within the Local Agency's jurisdiction;
- 3. Any public library located within the Local Agency's jurisdiction.

#### FLOODPLAIN MANAGEMENT BRANCH

During December 2008, the FPM Branch's Flood Risk Notification Program staff and its consultants conducted two workshops (one for the upper and lower Sacramento basins, and another for the lower San Joaquin basin) to discuss the method and draft Levee Flood Protection Zone (LFPZ) maps with local experts. During these workshops, DWR provided the draft maps and invited review comments from the participants. (DWR has scheduled a follow-up workshop on January 28, 2009 in order to respond to comments received from the local experts during and after the December lower San Joaquin basin meeting). On January 8, 2009, DWR conducted a workshop for the upper San Joaquin basin.

DWR plans to address comments and revise maps as necessary by the end of February 2009, present the refined maps to the public through workshops and to the Central Valley Flood Protection Board during March 2009, and make the LFPZ maps available to the public through the DWR website.

# California Water Plan Update 2009

The draft of the California Water Plan (CWP) Update 2009 is now available for review. The plan, which is updated every 5 years, provides a framework for meeting the state's water needs today and into the future. In Update 2009 there is greater emphasis on flood management and the concept of integrated flood management, which is a comprehensive approach to flood management that considers land and water resources at a watershed scale within the context of integrated regional water management. This integrated approach aims to maximize the benefits of floodplains and minimize the loss of life and damage to property from flooding. The regional reports includes for the first time regional flood information. The water plan includes a tool kit of 28 resource management strategies including flood risk management. The plan can be accessed at www.waterplan.water.ca.gov.

#### **Senate Bill 5 Building Codes Project**

The Building Codes Project team is preparing for two public meetings later this month. The meeting in Sacramento will be on January 21<sup>st</sup> while the one in midvalley (targeting Modesto) is scheduled for January 26<sup>th</sup>. The current state of development for the Building Codes Project will be presented in addition to the project's context within the FloodSAFE Initiative. The project team is refining the building code update provisions under consideration based upon a comprehensive identification of floodwater threats of the chief threats among them. The fourth Technical Advisory Committee meeting, scheduled for January 29<sup>th</sup>, will confirm the threats identified as most significant, as well as provisional solutions. The fifth TAC meeting will focus on actual code update language.

Central Valley Flood Protection Board Supervising Engineer Dan Fua is a member of the TAC. Project details can be accessed at: <a href="http://www.water.ca.gov/floodmgmt/lrafmo/fmb/fas/specialprojects/bldgcode.cfm">http://www.water.ca.gov/floodmgmt/lrafmo/fmb/fas/specialprojects/bldgcode.cfm</a>

#### FLOOD OPERATIONS BRANCH

#### Flood Operations Center (FOC)

The joint State-Federal Operations Center Section (FOC) is involved in the following activities related to emergency preparedness and response.

#### North Coast

- On December 28, 2008 the Eureka Flood Center was in contact with the California Nevada River Forecast Center (CNRFC), the Eureka National Weather Service Weather Forecast Office (NWS-WFO) and Del Norte County OES in response to the following situations due to extreme weather:
  - Creek and local stream flooding in areas within Del Norte County.
  - Highway 101 in Klamath was flooded and under traffic control, however, based on the Caltrans website, the highway was reopened the following morning.
  - Locations along the Smith River in Del Norte County reached monitor stage and were forecast to reach flood stage; however, the river did not reach flood stage.
  - Mad River at Arcata in Humboldt County reached monitor stage.

# <u>Upper Jones Tract</u>

In order to detect potentially changing conditions at the 2004 Upper Jones
Tract closure site, The Hydrology Branch coordinated with Central District
to install a WaterLOG® Bubbler System to monitor seepage through the
repair site. The system was installed on November 12, 2008 and initial
flow through the site was measured at 4 cfs. The river stage for the repair
site can be accessed at:

http://cdec4gov.water.ca.gov/cgi-progs/queryF?s=jtr

- The Delta Suisun Marsh Office (DSMO) has been working closely with RD 2039 under the auspices of the Delta Levee Subventions and the Delta Special Flood Control Projects programs:
  - An emergency work agreement for \$50,000 from the subventions program was sent to RD 2039 for review and signature during the week of December 23, 2008.
  - The RD has requested financial assistance through DWR Delta Levees Program – Delta Levees Special Flood Control Projects for \$300,000.
  - A December 19, 2008 letter from the Corps of Engineers to the National Marine Fisheries Service initiated a 90-day consultation under Section 7 of the Endangered Species Act. The letter requested expedited consultation, which is hoped to shorten the "90-day hold" on all work.

On January 7, 2009, a site visit was held to assess current conditions, including environmental concerns related to the proposed leakage mitigation work on the water side of the levee. The following agencies and interests attended this meeting: DWR- Delta Suisun Marsh Office, Hydrology and Flood Operations Office, and the Division of Engineering; USACE, Sacramento District, the engineer for RD 2039; Property Owners and Board Members for RD 2039 and the engineer that designed the proposed mitigation.

During the site visit to the repair site at the Upper Jones Tract, no changes on the rockfill and adjacent levee embankments were noted relative to what was observed during the previous visit of October 31, 2008. RD 2039 is ready to begin construction of a waterside blanket. The district had brought material (crushed rock with clayey fines) and construction equipment to the site. They are waiting for environmental permits to proceed. The planned waterside blanket appears to be a reasonable measure to address existing seepage. Continued monitoring and assessment of the site has been recommended.

#### Southern California

- Inyo County Mud/Debris Flows
  - Caltrans and Inyo County finished culvert work on Highway 395 and North Oak Creek, respectively.
  - The FOC conducted a series of conference calls during the week of December 15, 2008 to discuss a plan to safely remove the temporary diversion on North Oak Creek.
    - Cal OES tasked DWR to provide technical assistance to Inyo County in the development of a plan to safely remove the North Oak Creek temporary diversion.
    - Chang Lee of Southern District met with Inyo County, Los Angeles Department of Water and Power (LADWP), Caltrans and Cal OES representatives at the Inyo County Administrative Office.
      - Caltrans has been tasked by Cal OES to remove the diversion.
      - The diversion will be removed starting January 5, 2009 by notching the top and monitoring the flow while the diversion is removed over the course of 2days.
    - In addition, on December 17, 2008, the FOC contacted the Floodplain Management Branch as a possible resource to assist the County with long term technical assistance. The FOC is awaiting a response from the office.

#### Yorba Linda

- On December 17, 2008 Cal OES tasked DWR to provide technical assistance to Orange County with repositioning of k-rails and plugged culverts in response to active mudslides in the area of Yorba Linda.
  - Chang Lee of Southern District assisted the county with this mission task.

### **Pre-Season Meetings**

- FOC and Flood Operations Branch staff, working closely with the EFC, NWS, and North Coast agencies, conducted the last pre-season meeting on December 4, 2008.
- The FOC also attended the Sacramento County and Tehama County winter preparedness meetings on November 19 and November 21, respectively.

### Emergency Action Plan

- FOC Staff attend and participate in local reservoir and utility district EAP face to face meetings, tabletop and functional exercises. The FOC participated in the following EAP functions:
  - Merced Irrigation District EAP Functional Exercise November
     5. 2008
  - PG&E EAP Face to Face Meeting November 5, 2008.
  - o Oroville Dam EAP Meeting November 18, 2008.
  - Drum-Spaulding, Narrows, and Chili Bar Annual EAP Meeting (PG&E) - December 10, 2008.

# Delta Emergency Operations Plan (EOP) Tabletop Exercise:

 The FOC participated in the Delta EOP tabletop exercise held on December 12, 2008. The exercise tested the draft Delta EOP and provided the FOC an opportunity to work over scenarios and discuss procedures with the Incident Command Teams and other branches within the Division of Flood Management.

#### **Pre-Season Training**

FOC training sessions have been completed for the fall of 2008. The
FOC chief will be coordinating with the NWS representative, the
Hydrology Branch and the Decision Support Section to start a new
cycle of training for the winter/spring 2009 season. In addition, phone
drills are also in the work to give staff the opportunity to use the
available tools and to test how our procedures are working.

# Local Emergency Preparedness and Response Section

In early December, staff participated in the design and planning process for the Delta EOP Tabletop Exercise. This exercise was intended to be primarily a learning experience and test the new Delta EOP. Also in December, the entire Flood Operations Staff toured the Folsom Dam. Staff gained knowledge of the dam and its critical role in the American River Flood System. The tour was also an opportunity for the Bureau of Reclamation and DWR Staff to meet and reaffirm existing professional relationships.

The In-Kind Services Agreement with the U.S. Army Corps of Engineers (Corps) is in the final stages. This Agreement will allow DWR access to Corps mapping products of specific Delta areas. The Corps will provide the maps, and DWR will post and maintain the maps on their website. The In-Kind Services Agreement is now being reviewed by the Corps' Legal Department.

FOC Staff and its consultants have started the process of preparing the Delta Multi-Agency Integrated Flood Emergency Operations Plan (Delta MIF-EOP). The Delta MIF-EOP will be an integration of local agency EOPs, the USACE Delta Levee EMRP, and the DWR Delta Flood EPRP. This document will be prepared from existing plans and programs related to the Delta. This document will define the roles, responsibilities, and resources available to all emergency responders and stakeholders in the Delta. Local agencies, the Corps, Cal-OES, and other stakeholders in the Delta are engaged in a DWR sponsored "Working Group" that will continue this process. This group will review and provide comments to the Delta MIF-EOP.

### Flood System Analysis Section

#### AB 156 Local Agency Report

The Flood System Analysis section assisted the Local Maintaining Agency Assessment section in meeting the December 31 reporting deadline for the "AB 156 Local Agency Annual Report". Our role was to 1) enter hard-copy agency information into the electronic database, 2) prepare short summaries from all the technical information submitted for each agency, and 3) compile formatted reports for each agency.

# State Emergency Action Team (SEAT) Reports

The Flood System Analysis section, along with staff within the entire Flood Operations Branch, have collected key information (contacts, impacts, risks) out of the 2008 wildfire SEAT reports for the Basin Complex, Gap, Butte, Shasta,

Summit, Piute, and Telegraph fires. Several new reports have been published and include the Mendocino, Marek, and Sesnon fires. Staff have started collecting key information from the Mendocino and Marek reports and will be starting on the Sesnon report soon. In the event of an emergency within a burned watershed, the Flood Center will serve as the main point of contact for the State to respond to debris flows and the impacted areas. In addition, staff are monitoring the OES FTP website for any updated information on reports and/or maps/GIS files.

#### **Decision Support Section**

Modernization of the Division of Flood Management's web portal

Staff continued to maintain the Division of Flood Management's web portal by posting updates for the following programs:

- Interim Guidelines for Funding Delta Levee Special Flood Control Projects, Delta Suisun Marsh Office
- State Climatologist's Monthly Climate Summaries and Monthly Weather Summaries, Hydrology and Flood Operations Office
- State Meteorologist's Monthly Weather Summaries, Hydrology and Flood Operations Office
- Flood Control Subventions Funding Status of Unpaid Claims on Hand, Flood Projects Office

The Division of Flood Management's web portal supports the FloodSAFE goal to inform and educate the public on flood emergencies and response. In addition, staff also posted updates to the FloodSAFE web portal for the Early Implementation Program Solicitation for Proposals. Both the Division of Flood Management's web portal and the FloodSAFE web portal are integrated into the Department of Water Resources portal to be compliant with State portal standards.

Modernization of the Flood Operations Center IT Assets

As of December 26, 2008 more than 100 users are signed up for webcasts of the Weather/Hydrology Briefings. Weather/Hydrology Briefings are generally conducted during flood season to keep emergency response partners informed of any potential flooding or conditions of concern. Besides DWR staff, the following agencies are among those registered to access the webcasts:

- American River Flood Control District,
- Butte County,
- Castaic Lake Water Agency,
- City of Biggs,
- City of Chico Fire Department,
- City of Napa,
- City of Stockton OES,
- City of Tehama,
- · City of Willows Police Dept,
- Contra Costa County Office of the Sheriff,
- David Ford Consulting.
- Del Norte County Emergency Services,
- El Dorado County,
- Glenn County,
- Governor's State OES

- Kaweah Delta Water Conservation District,
- Kings River Water Association,
- Lake County Public Works,
- Marin County Flood Control and Water Conservation District,
- Merced Irrigation District,
- Monte Vista Water District,
- NOAA Earth System Research Laboratory,
- NWS California/Nevada River Forecast Center,
- NWS Eureka,
- NWS Las Vegas,
- Sacramento County,
- Sacramento County OES,
- San Joaquin County OES,
- South Feather Water and Power Agency,
- Tulare Lake Basin Water District,
- Turlock Irrigation District,
- US Army Corps of Engineers,
- US Bureau of Reclamation,
- Ventura County Sheriff's OES,
- Yuba County Water Agency,

Providing these webcasts supports the FloodSAFE goal to expand webbased weather briefing access to additional local, State, and federal agencies. Also, the section continued to maintain IT assets for the Flood Operations Center and provide first-level PC support to the Flood Operations Branch.

# **Emergency Response and Security Section**

#### Exercises:

 On December 12, 2008, we conducted a tabletop exercise to test the current draft of DWR's Delta EOP. Representatives from the Sacramento County Operational Area office, State OES, and USACE attended to observe and provide feedback. The staff of the Flood Operations Center and a representative from the National Weather Service also attended. The representatives were tested on three scenarios, and they used the Delta EOP to make suggestions and identify areas where improvements to the plan are needed. Evaluators kept track of the responses, and a hot wash was conducted at the end of the exercise to discuss better ways to respond to emergencies. An after action report of the responses is being developed and compiled into a matrix. Included will be an improvement program matrix that will summarize issues raised during the exercise with suggestions as to how to address the issues and who should be responsible for implementing those suggestions. This report and its matrix will be reviewed by the participants and other appropriate people before distribution.

#### FLOOD PROJECT MODIFICATIONS & PERMITS BRANCH

#### Early Implementation Program (EIP)

The four EIP projects shut down in November for the duration of the flood season. TRLIA will attempt to resume construction on the setback levee and "away from the river" features throughout the winter as soon as the weather permits. At this time, it is unknown what impact the State budget situation (and associated uncertainty of bond fund cash flow) will have on these ongoing projects. All four projects would need additional funding by next construction season to stay on task and complete the projects by the end of October 2009, as planned.

The final EIP Guidelines, along with the EIP Proposal Solicitation Package, has been posted on the FloodSAFE website. The deadline for EIP competitive applications for \$163 million funding is March 2, 2009. A Public Workshop is planned for January 20, 2009 here in Sacramento. SAFCA and WSAFCA are working on their submittals, which would allow the two EIP Capital Outlay Funding Agreements to be initiated for a total funding of \$230 million.

# Three Rivers Levee Improvement Authority (TRLIA)

TRLIA's archaeologist discovered human remains, which were determined to be of Native American origin within the alignment of the new setback levee. The proper protocol requires that a tribal representative, considered to be the most likely descendant, be contacted regarding the discovery. TRLIA has held several meetings with the tribal representatives to find a resolution, which will enable construction to proceed without a major delay.

DWR EIP program staff are working with TRLIA on a land acquisition that has environmental implications. The landowner is demanding that the effluent from the processing plant on the land side of the new levee to be allowed to discharge in a designated area that could have alfalfa or wheat grass only. DWR will likely request soils testing to verify the impact of previous discharges before a final determination is made.

Sacramento Area Flood Control Agency (SAFCA) – All construction activities for this year have been completed. SAFCA is budgeted to receive funding (\$193.3M) for next year's project under EIP Capital Outlay. Now that the EIP Guidelines are finalized, Program staff are working with SAFCA to gather all the necessary documentation to initiate the Funding Agreement. The new funding agreement for EIP Capital Outlay may not be approved until the budget issues are resolved.

**Reclamation District 2103** (RD 2103) – RD 2103 has requested an increase in State funding for this project from \$14.7 to \$18.2 million to cover unauthorized eligible costs for work identified in the Funding Agreement. An amendment to the Funding Agreement has been prepared to provide additional funding from Fiscal Year 08/09 EIP Competitive Budget. The amendment is now on hold until the budget issues are resolved.

**Levee District No. 1 of Sutter County** (LD1) – LD1 is finalizing their environmental compliance documentation with construction scheduled to start next spring. They are continuing with their real estate acquisitions over the winter. Payments for 3 of the 5 properties have been processed. Also a request for reimbursement for design activities will be processed, as soon as DWR receives the required submittals.

West Sacramento Area Flood Control Agency (WSAFCA) – The I Street Bridge levee work is complete. Now that the EIP Guidelines are finalized, Program staff are working with SAFCA to gather the necessary documentation to initiate the Funding Agreement. The funding agreement may not be approved until the budget issues are resolved.

**Reclamation District 17** (RD 17) – RD 17 is well on the way with the project approved last month by CVFPB. A DWR review of the documentation provided indicates that their project is lacking a number of studies and reports outlined in the draft EIP Guideline. A letter outlining such deficiencies, especially the environmental compliance documentation, was sent to RD-17. Compliance with all EIP Guidelines is necessary for RD-17 to be able to compete for any portion of the \$163 million EIP Competitive funding.

#### STATEWIDE GRANTS BRANCH

#### **Subventions Program**

The second public comment period for the draft Proposed Assembly Bill 1147 (AB1147) Regulations has closed. Subventions staff are preparing a response to comments to be included in a package of Proposed Regulations which, along with supporting documentation, will be submitted to the Office of Administrative Law for review and approval.

# Local Levee Urgent Repair Program Local Levee Evaluation Program

Discussions are ongoing to award a \$5-million grant to Orange County for urgent repairs needed on San Juan Creek near San Juan Capistrano. Four other LLUR applications were denied based on incompleteness.

DWR has completed the technical review of sixteen LOLE applications and is preparing recommendations for final determination of awards.

#### Floodway Corridor Program

The Floodway Corridor Program is in the process of revising guidelines in preparation for an additional grant funding cycle.

The section is exploring the possibility of advance mitigation for flood risk management projects on properties funded by the program at several sites, including in the Elkhorn Basin and near Woodson Bridge.

#### **URBAN LEVEE EVALUATIONS PROJECT**

The Urban Levee Evaluations Branch was originally charged with performing geotechnical evaluations on approximately 350 miles of project urban levees. Recently, approximately 120 miles of non-project urban levees were added to the scope of work. An urban levee is defined as protecting at least 10,000 people. Levee evaluations focus on urban levees in the geographic areas of Reclamation District (RD) 17, RD 404, Natomas, West Sacramento, Marysville, Woodland, Davis, Stockton, MA9, American River, Sacramento, the Sutter Basin, and RD 784.

The purpose of these evaluations is to support the Central Valley Flood Management Planning (CVFMP) and other flood management related programs by determining if these levees meet defined geotechnical criteria and, if appropriate, identify remedial measure(s) to meet those criteria. This evaluation will be conducted with the goal of providing 200-year protection for urban areas using the DWR and the Corps levee design criteria.

#### General

- The State's budget deficit has resulted in stopping all new task orders. Only
  existing task orders may be worked on. This will result in project delays and
  may affect levee evaluations ability to review local agency and Corps
  projects.
- The Levee Evaluations Branch continues to work closely with RD 17, Natomas (SAFCA and RD 1000), Three Rivers, West Sacramento, and others within the Department and the Corps to review issues concerning early implementation projects.
- 3. At the request of Mr. Gary Hester, the Levee Evaluations Branch continues to support the Central Valley Flood Protection Board in assessing a crack in segment 1 of the Feather River levee across from Star Bend. This crack was first observed after slurry wall construction was completed. At this time, winterization measures and additional explorations and characterization of this area was recommended.
- Weekly coordination meetings with the Corps continue so that subsurface explorations plans are approved in advance of work and efforts are not duplicated.
- 5. Issues of strength for use in design and an erosion toolbox were presented to the Independent Consulting Board the week of December 8, 2008. The ICB findings for strength mirrored past Corps manuals for the intermediate pool stage, which was omitted in the current Corps manuals. Generally the ICB was in agreement with the progress of levee evaluations to date. The next ICB meeting will be in March 2009.

The work performed in December 2008 is broken into three geographic urban levee areas of North, Central, and South is as follows:

#### **North Urban**

- Sutter Basin: The Corps finished reviewing the Draft Phase 1 Geotechnical Evaluation Report (P1GER) and URS will incorporate all review comments from the various agencies. The report will be finalized in January 2009. The Phase 1 Geotechnical Data Report (P1GDR) was finalized and distributed to the local stakeholders in November 2008. URS is continuing the preparation of the Supplemental Geotechnical Data Report (SGDR).
- Marysville: Work on the draft Supplemental Geotechnical Data Report (SGDR) is continuing and should be submitted to DWR as a Draft in January 2009.
- 3. RD784: The draft Supplemental Subsurface Investigation Work Plan was delivered by URS to DWR and is continuing to undergo an internal QA/QC process and Corps review. DWR at the request of the Central Valley Flood Protection Board is continuing to monitor GEI/TRLIA mitigation measures associated with the slope failure in Segment 1 along the Feather River.

#### **Central Urban**

- 1. West Sacramento: The draft SGDR for West Sacramento is underway and is expected to be delivered to DWR in the near future.
- Sacramento River (between the American River and Freeport): The draft P1GER for Sacramento River was delivered to DWR during the month of October 2008. The draft P1GER report is currently undergoing an internal DWR QA/QC process and Corps review.
- 3. NEMDC: The final P1GDR report for NEMDC-East levees was delivered to DWR in November 2008. A draft P1GER for NEMDC-East levees is currently underway and will incorporate field investigations from SAFCA's exploration plan prior to its expected release to DWR in December 2008. The final P1GDR report for NEMDC-West levees was delivered to DWR in November 2008. A draft P1GER for NEMDC-West levees is expected to be delivered to DWR in December 2008.
- 4. Natomas North, West, and South (NWS): The draft (Technical Review Memorandum) TRM for Natomas NWS, which encompasses previous studies completed on behalf of SAFCA, USACE, and DWR, was delivered to DWR in September 2008. This report is currently undergoing an internal DWR QA/QC process and Corps review.

- American River: A draft SGDR for the American River levees is underway and is expected to be delivered to DWR in the near future. The final TRM for the American River levees is expected to be delivered to DWR in the near future.
- Davis: The analysis approach is currently being revised to eliminate the need for the P1GER and better inform the GER. DWR is meeting with Yolo FloodSAFE scheduled on January 8th, 2009 to provide an update and to coordinate objectives.
- Woodland: The analysis approach is currently being revised to eliminate the need for the P1GER and better inform the GER. DWR is meeting with Yolo FloodSAFE scheduled on January 8th, 2009 to provide an update and to coordinate objectives.

#### South Urban

- SJAFCA: The Draft P1GER for the Calaveras River Drainage was delivered to DWR in August 2008. This report went through an internal DWR QA/QC process and USACE review. The report is currently being revised based on review comments.
- SJAFCA: The Draft P1GER for the Bear Creek Drainage was delivered to DWR in September 2008. This report went through an internal DWR QA/QC process and USACE review. The report is currently being revised based on review comments.
- 3. RD 404: The Draft P1GER for RD 404 was delivered to DWR in September 2008. This report went through an internal DWR QA/QC process and USACE review. The report is currently being revised based on review comments.
- RD 17: The draft Supplemental Geotechnical Data Report (SGDR) for RD-17 was delivered to DWR in late November 2008. This report is undergoing an internal DWR QA/QC process and USACE review.
- Greater Stockton Area Urban Non-Project Levees: Field exploration commenced in December 2008. CPT exploration was initiated at Rough and Ready Island. Mud rotary borings and piezometer installations to follow in January 2009.

#### NON-URBAN LEVEE EVALUATIONS PROJECT

The Non-urban Levee Evaluations Branch was created to perform geotechnical levee evaluations on about 1,250 miles of non-urban State/Federal project levees. A non-urban levee is defined as protecting 10,000 or less people. The project focuses on the non-urban State/Federal project levees in the Sacramento River and the San Joaquin River flood control systems. This project is in the process of expanding to include the 388 miles of appurtenant non-project levees.

The purpose of these evaluations is to support the Central Valley Flood Management Planning (CVFMP) and other flood management related programs by determining if these levees meet defined geotechnical criteria and, if appropriate, identify remedial measure(s) to meet those criteria. This evaluation will be conducted with the goal of providing the design profile level of protection in non-urban areas using the DWR and the Corps levee design criteria.

#### **Activities in December 2008:**

- 1. Drafting of a Letter of Agreement with the Corps to provide support to levee evaluations projects continued.
- 2. Project management plan development continued.
- 3. Development of a Process Activity Tool (workflow documentation) continued.
- 4. Geomorphic studies for the Sacramento and San Joaquin River flood control systems continued.
- Regional Coordinators continued contacting the local agencies providing an overview of the FloodSAFE program and informing them that consultants will be collecting any available historical data and seeking local agency's assistance in performing field reconnaissance.
- URS and Kleinfelder teams continued field reconnaissance work and meeting with local agencies to investigate levee historical performance and gather other available data for the Sacramento River flood control system.

#### LEVEE REPAIRS BRANCH

#### **Sacramento River Bank Protection Project (SRBPP)**

2008 scheduled construction repairs to all eight sites (American River 0.3L and 2.8L, Sacramento River 49.7L, 52.3L, 53.5R and 177.8R, Cache Slough 21.8R, and Steamboat Slough 16.6R) have been completed.

A total of 34 sites are under design for the Year 2009 and 2010 construction. The Land and Right of Way access and protection issues related to intakes, decks, cables and other infrastructure at 10 sites totaling about 7,000 lineal feet have been resolved. The goal is to repair at least 9,000 lineal feet of bank erosion damage in Year 2009 out of the remaining authorized 15,650 lineal feet left in this program. The remaining work will be completed in Year 2010.

Eminent Domain Resolution of Necessity action on Cache Creek sites LM 3.9L and 4.2L damaged during the 2006 Flood is before the Board for today's hearing.

# San Joaquin River Flood Protection Project

Structural rock and landscaping work on all three sites (San Joaquin River Mile 42.3R, Paradise Cut Levee Mile 3.8L and Mormon Slough Levee Mile 11.8R) has been completed except some plantings at the lower bank on San Joaquin River Mile 42.3. This site requires adjustments to the lower rock bench and remaining plantings will be completed in spring, 2009.

Engineering design and environmental assessment work for 5 sites repairs during the next year is in progress. Consultations with agencies regarding permitting of these five construction sites are ongoing. The regulatory agencies have requested DWR to prepare Programmatic Environmental documentation of the future levee repairs projects on a long-term basis. Also, two Policy papers for State/Local cost sharing arrangements for future erosion and underseepage repairs have been prepared for the FloodSAFE Management Team approval.

#### 2006 Public Law (PL) 84-99 Rehabilitation Assistance Program

Repairs in 2009 including 127 flood damaged sites and a major slurry wall project on the Chowchilla Bypass Left Bank in the Lower San Joaquin Levee District have been completed. Work on Project Information Reports (PIR) and detailed engineering and environmental designs for the remaining 34 sites are in progress. 17 sites in RD 150 are being monitored for maintenance by RD 150. The Division of Flood Management Fall Inspection Report has given minimal acceptable rating to RD 150 for its maintenance work in 2008. If RD 150 meets all maintenance requirements during the spring 2009 inspection, these sites will be included in next year's repair program.